Moving Massachusetts Forward.

massDOT

Massachusetts Department of Transportation

Accelerated Bridge Program

Bicycle, Pedestrian, and Accessibility Improvements

MassDOT Highway District 6 **July 13, 2010**

Massachusetts Department of Transportation

- **The Massachusetts Department of Transportation, MassDOT, is the unified transportation organization serving the residents and visitors of Massachusetts with a focus on public safety, customer service and efficiency.**

- **MassDOT is governed by a five member board, managed by a Secretary/CEO, and includes four divisions: Highway, Rail & Transit, Registry of Motor Vehicles, and Aeronautics.**

- **MassDOT was created on November 1, 2009, the result of a historic transportation reform law signed into law by Governor Deval Patrick in June 2009.**

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Patrick-Murray Accelerated Bridge Program

- **Authorization:**
  - Chapter 233 of the Acts of 2008
  - Project must be complete by 2016

- **Program Goals:**
  - Improve the Condition of the Commonwealth's Bridges
  - Stimulate Economic Development and Job Creation
  - Save Money by Completing Projects Sooner
  - Complete Projects Efficiently and Innovatively
  - Provide Access and Opportunity for all
  - Manage with Transparency and Accountability

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Program Overview- 8 years only

- **Size and Scope**
  - Former MassHighway: $2.078 billion
    - rehabilitation or replacement of 189 bridges
    - preservation of 305 bridges
  - Former DCR: $906 million
    - rehabilitation or replacement of 29 bridges
    - preservation of 50 bridges

MassDOT Total Program: $2,984,000,000

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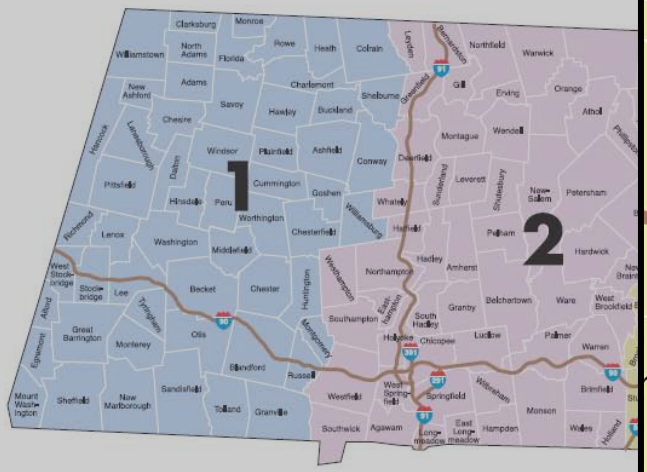
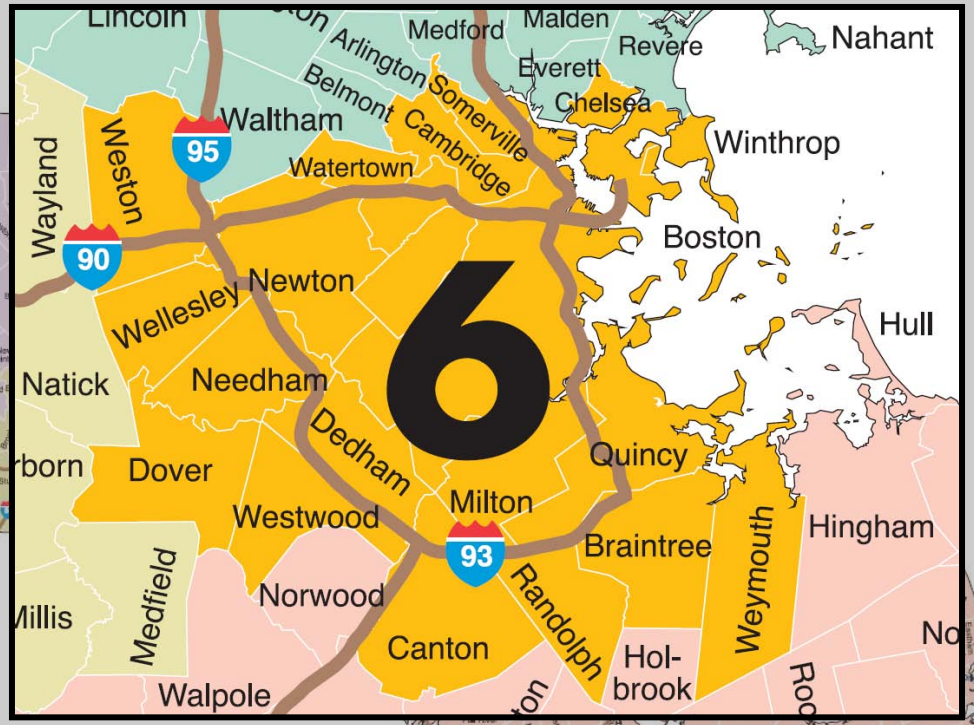
District 6





Boston	**Chelsea**	**Newton**	**Wellesley**
Braintree	**Dedham**	**Quincy**	**Weston**
Brookline	**Dover**	**Randolph**	**Westwood**
Cambridge	**Milton**	**Somerville**	**Weymouth**
Canton	**Needham**	**Watertown**	**Winthrop**

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Bike, Ped, and Accessibility Goals

- **Design in accordance with the Design Guide - from the outside in - accounting for most vulnerable users first**
- **Strive to make improvements wherever possible**
  - Increased sidewalk widths
  - Inclusion of bike lanes
  - Improved approaches
  - Study all feasible options
- **Keep people moving – Projects are developed to incorporate accommodations during construction**
- **Work with partner agencies and Cities and Towns to ensure connectivity**

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Mystic Valley Parkway – Somerville

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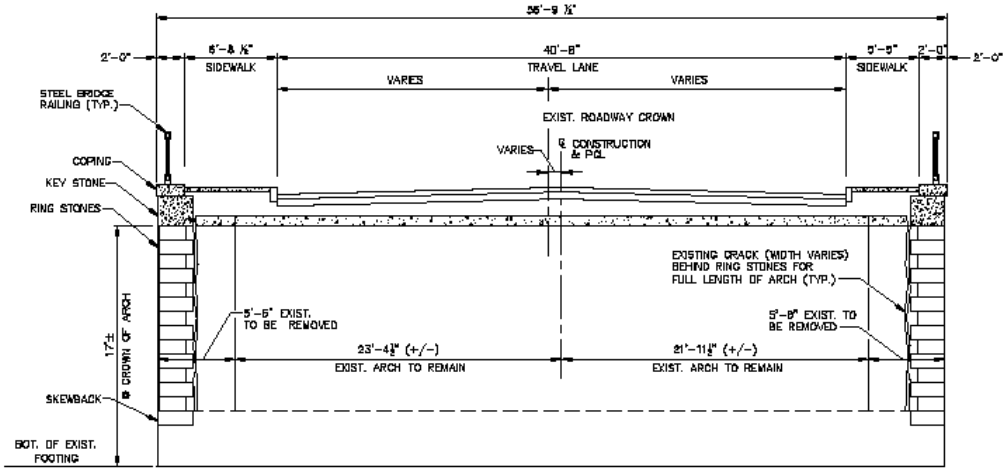
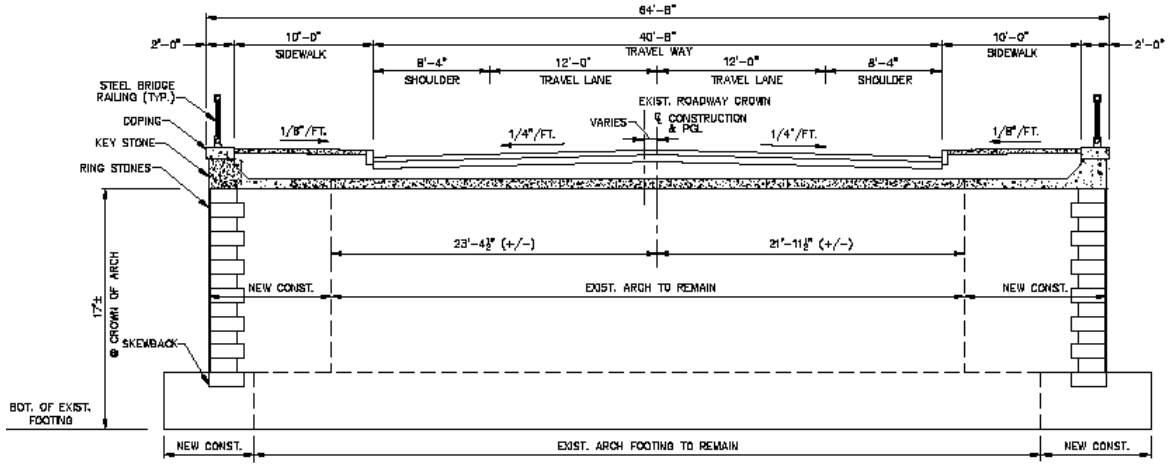
Project Example – Mystic Valley Parkway



EXISTING CROSS SECTION
AT ARCH CROWN & VIEW BEYOND
(LOOKING WEST)



PROPOSED CROSS SECTION
AT ARCH CROWN & VIEW BEYOND
(LOOKING WEST)

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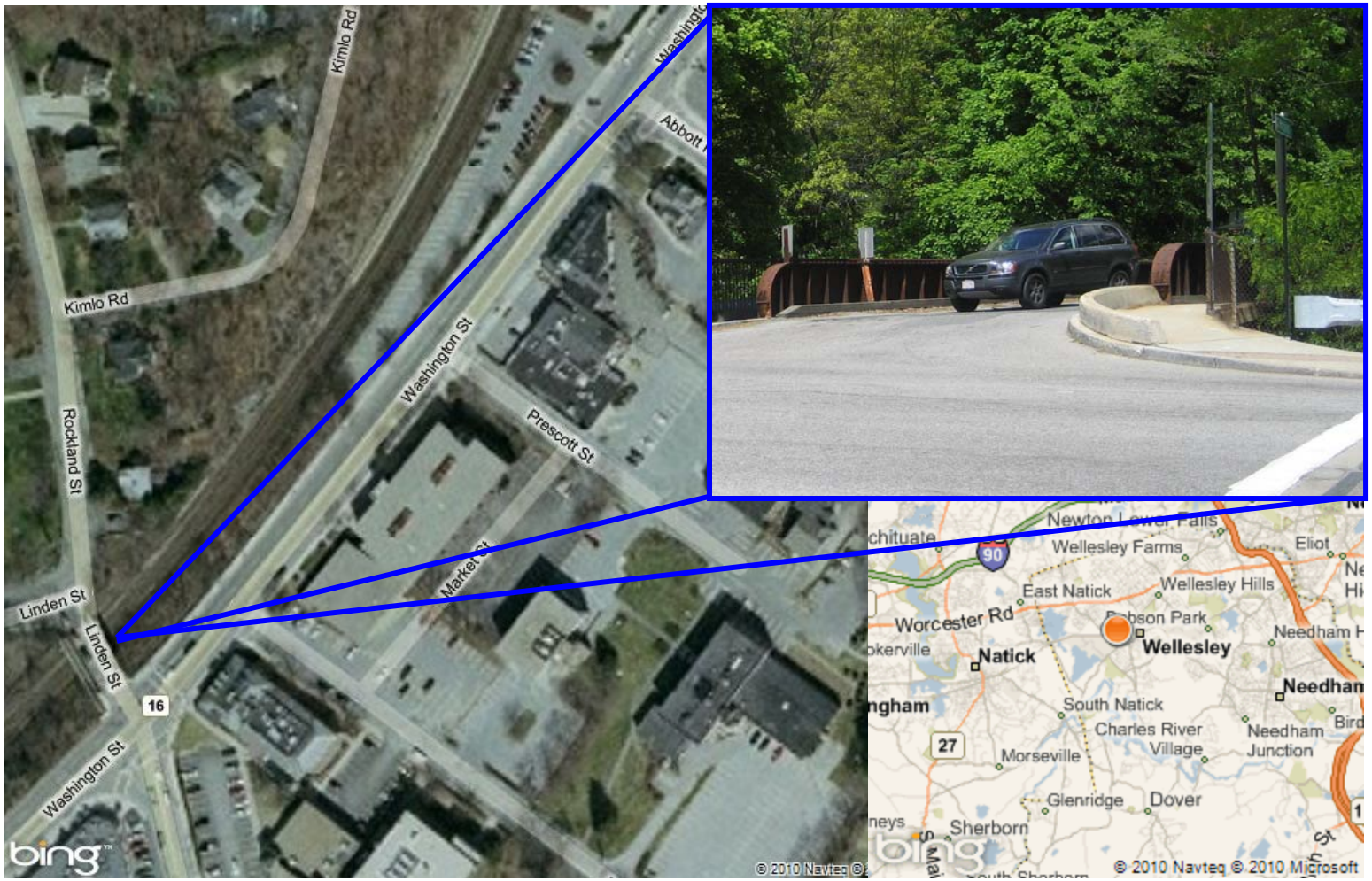
Rockland Street - Wellesley

Building in accommodations during construction



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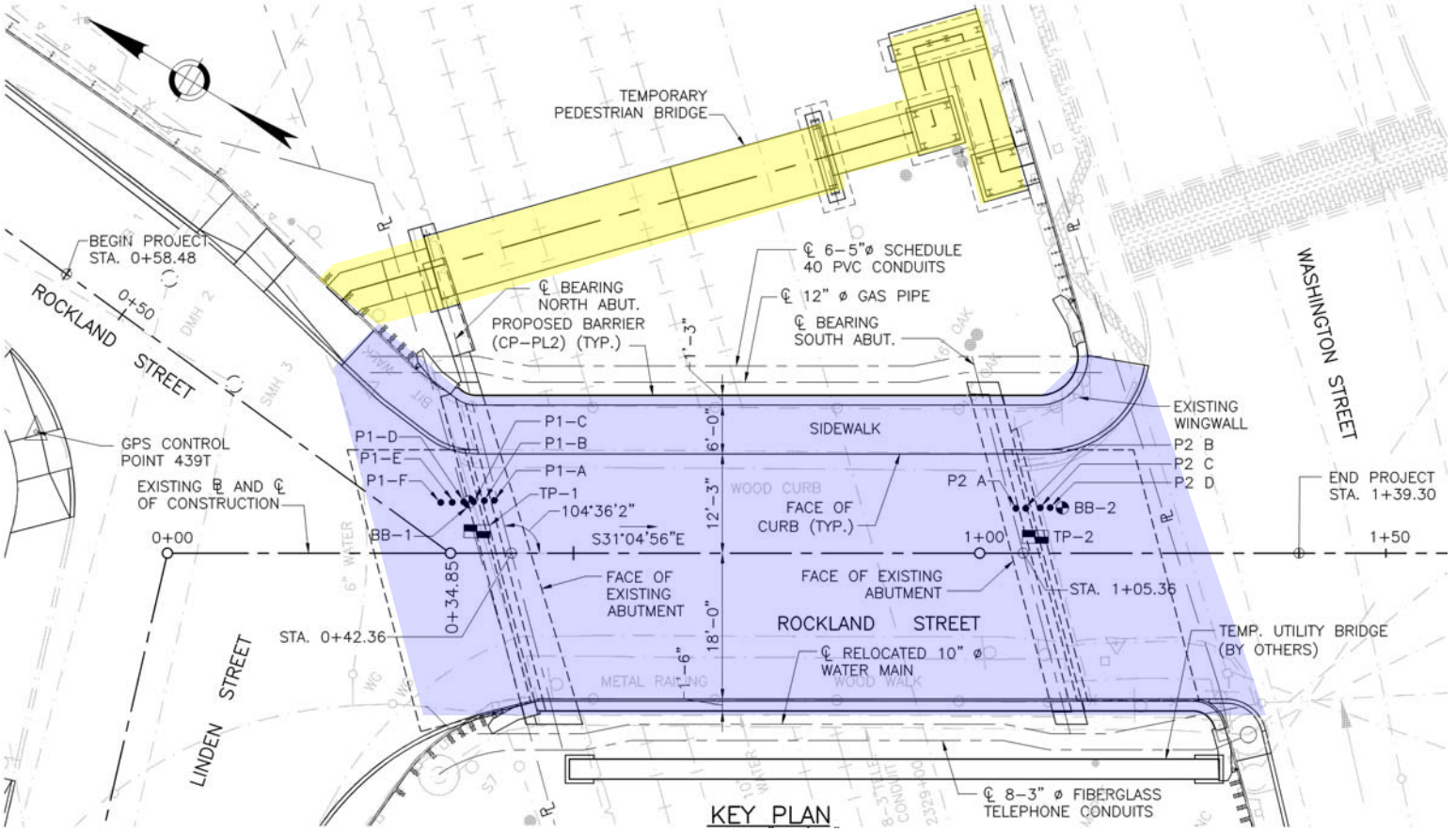
Rockland Street - Wellesley

Building in accommodations during construction



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River Street – Boston

Using accelerated techniques to minimize impacts

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River Street – Boston

Using accelerated techniques to minimize impacts

Self Propelled Modular Transports

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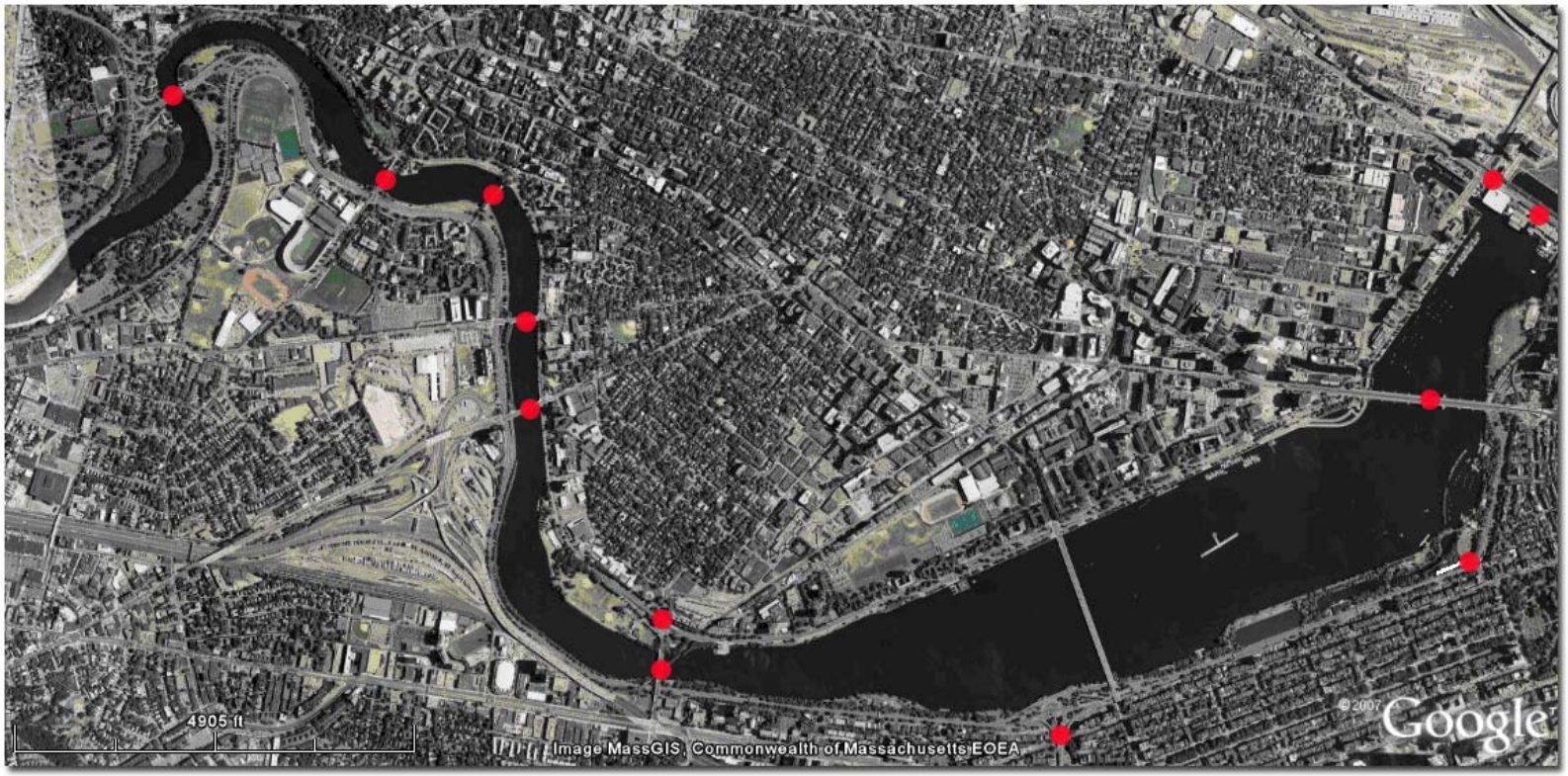
Charles River Basin Projects



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Challenges and Goals

- **Heavy Use – All Seasons**
- **Both commuters and recreational users**
- **Maintaining and creating connections to existing facilities**

- **Measures Taken**
  - Early Measures – Toole
  - Halvorson – Basin Study
  - Active Risk management and Sequencing – Traffic
  - Project Specific Specialty Consultants and Studies

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Early Measures - Toole Design

- Toole was consulted with on early ABP projects
- Assessed Bike and Pedestrian Mobility During Construction Phases
- Made Recommendations on Final Design
- Developed Recommendations and Conceptual Plans
- Provided a framework for future consultant contracts

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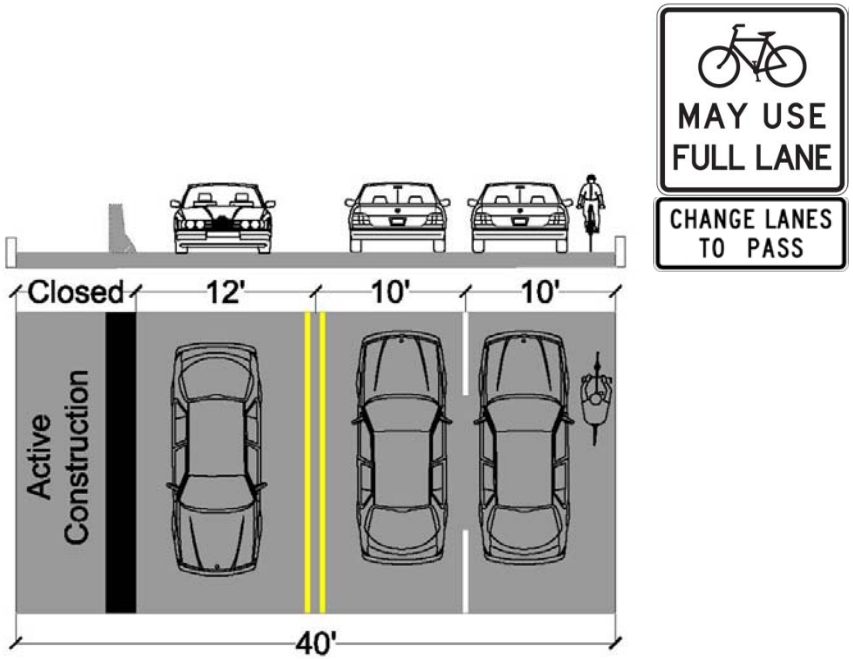
Shared Lanes During Construction



- Cyclists often ride close to curb when no guidance provided
- It is unsafe to pass cyclists within narrow travel lanes (less than 14 feet)

- Encourage cyclists to “take the lane” and ride safe distance from curb
- Encourage motorists to pass with care or drive behind cyclists

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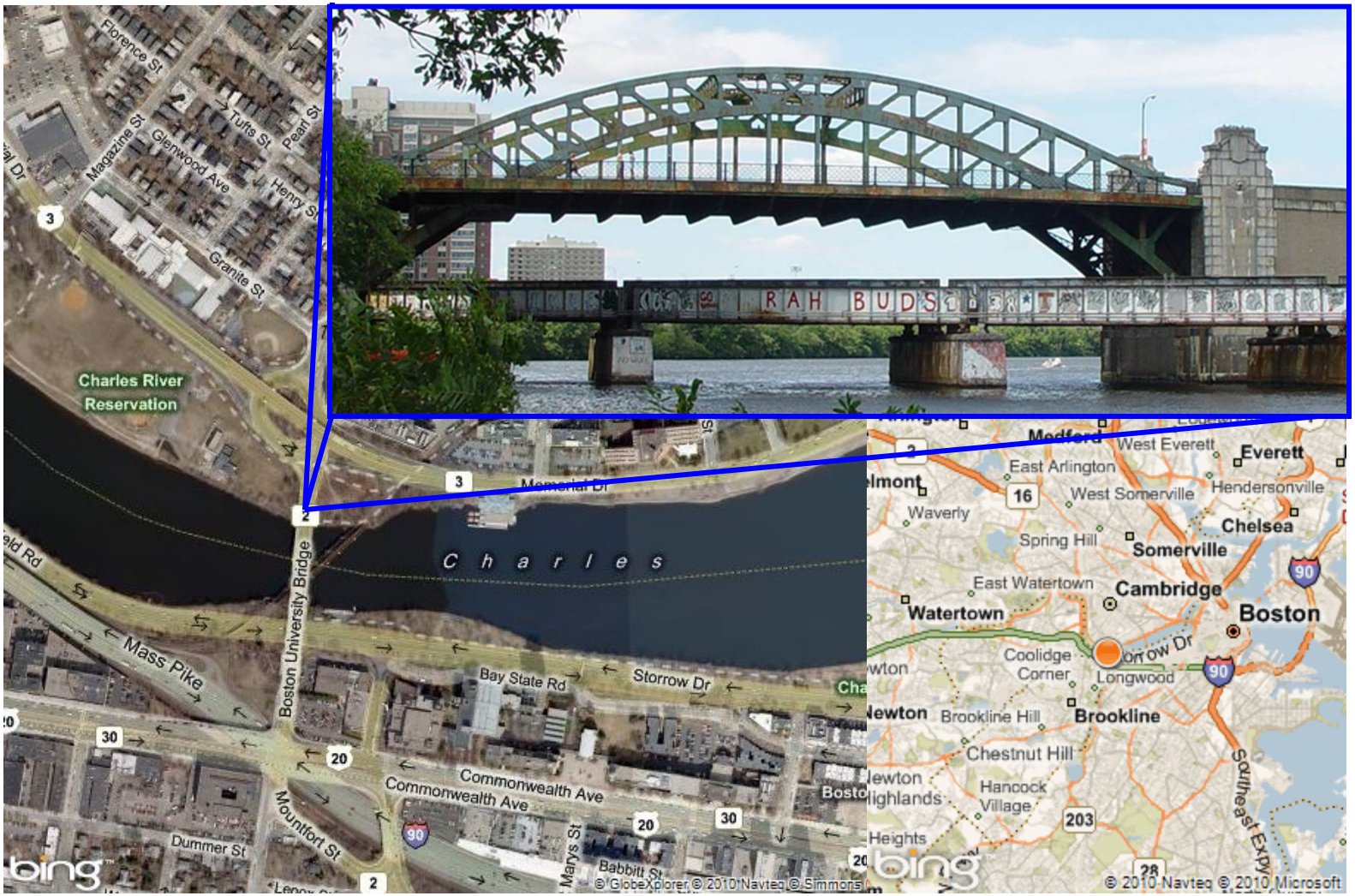
Boston University Bridge - Boston



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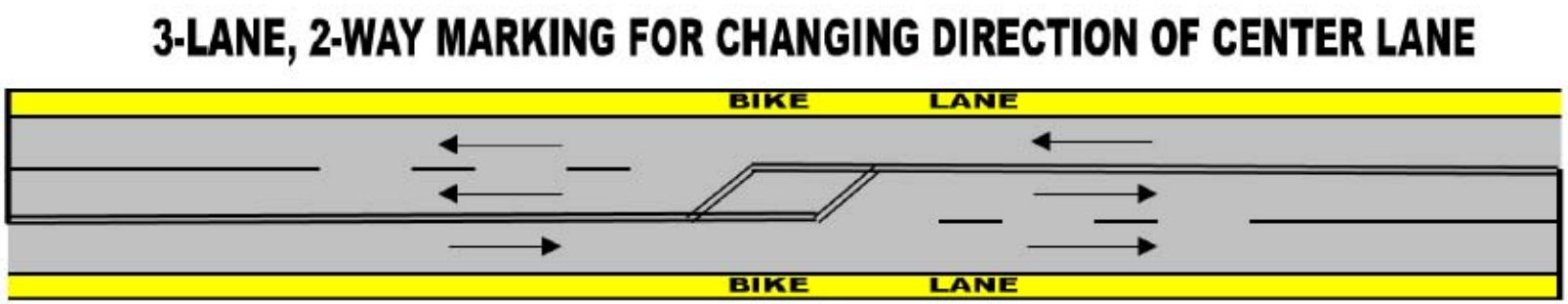

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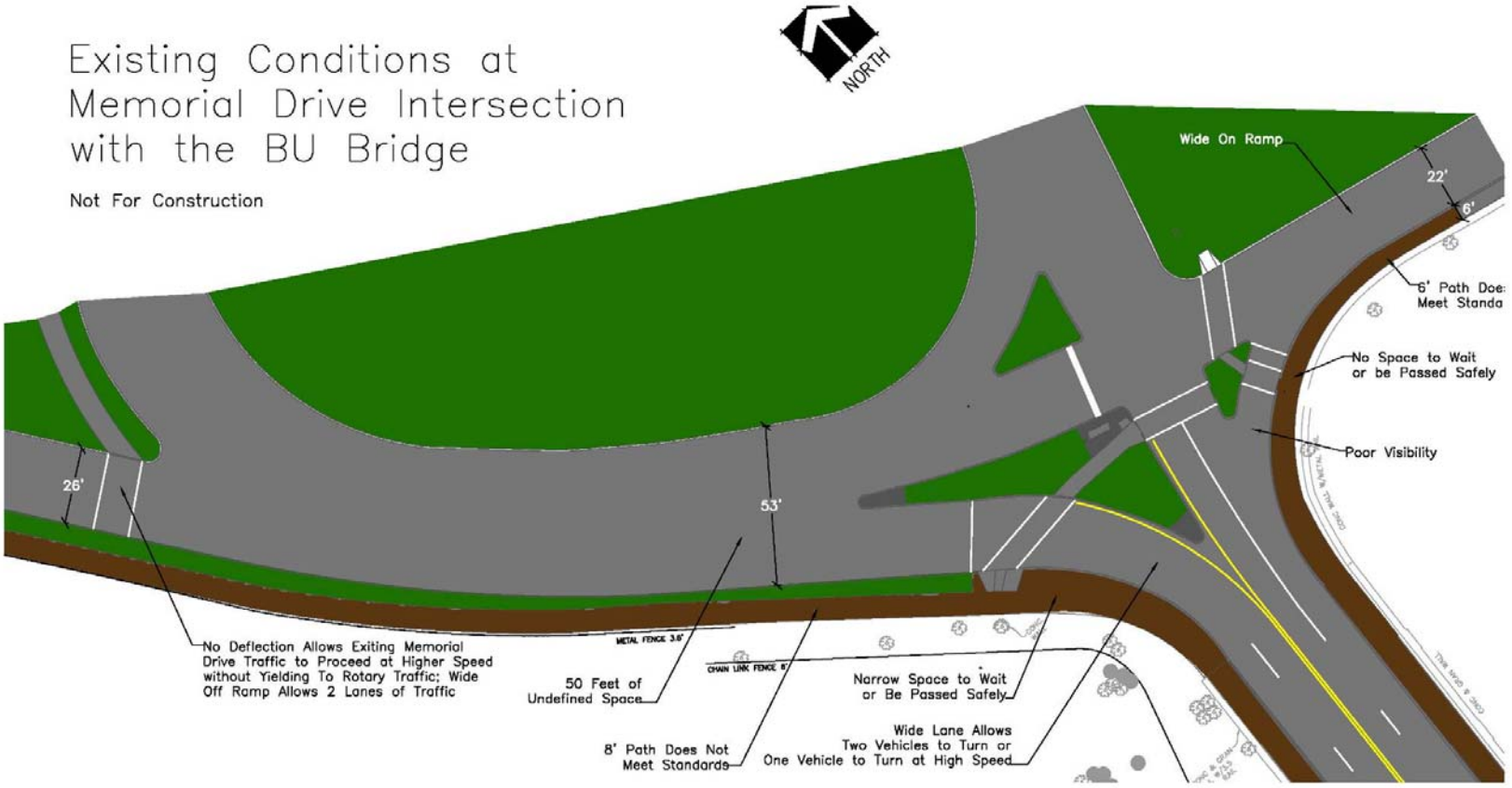

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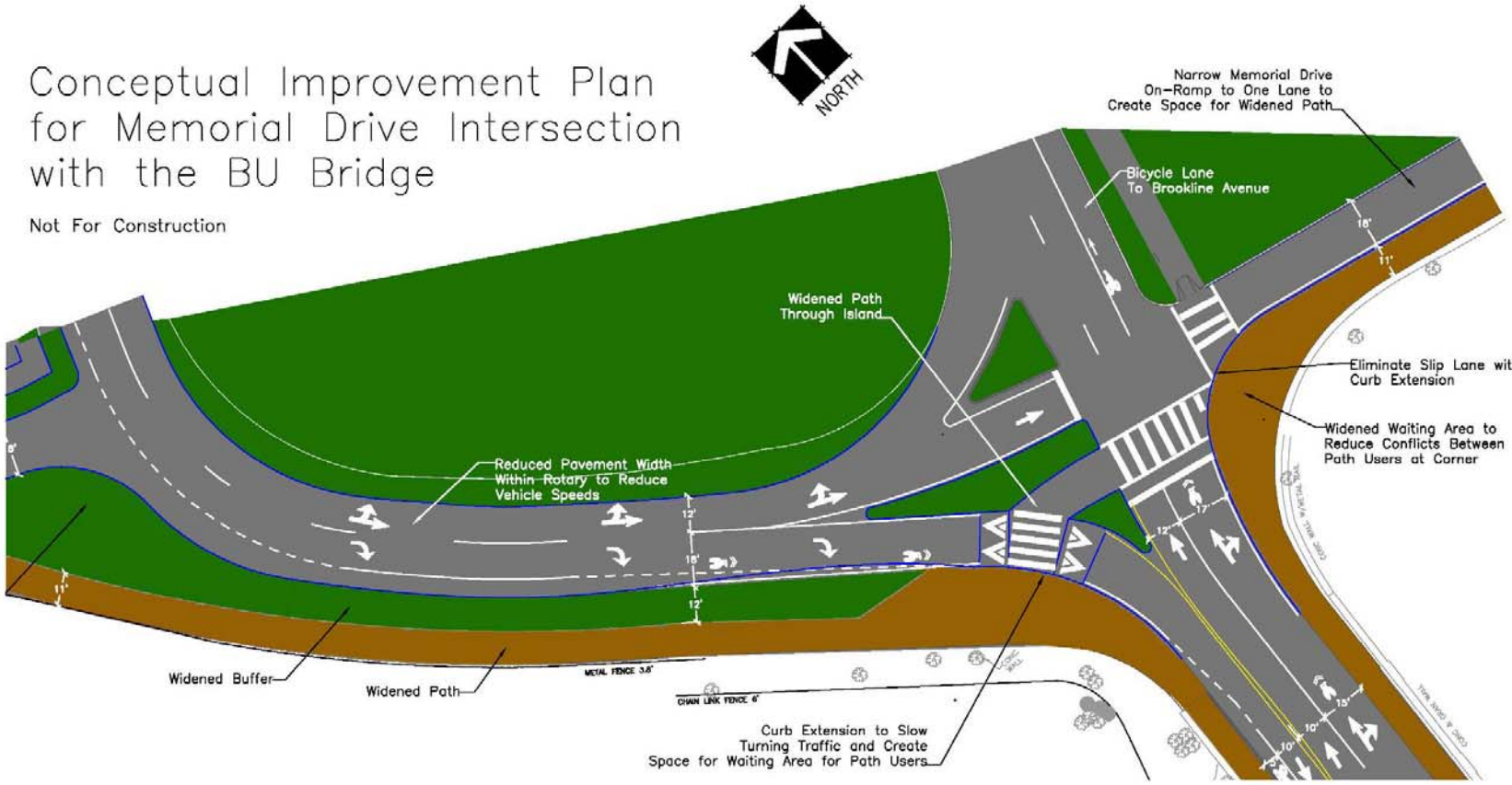

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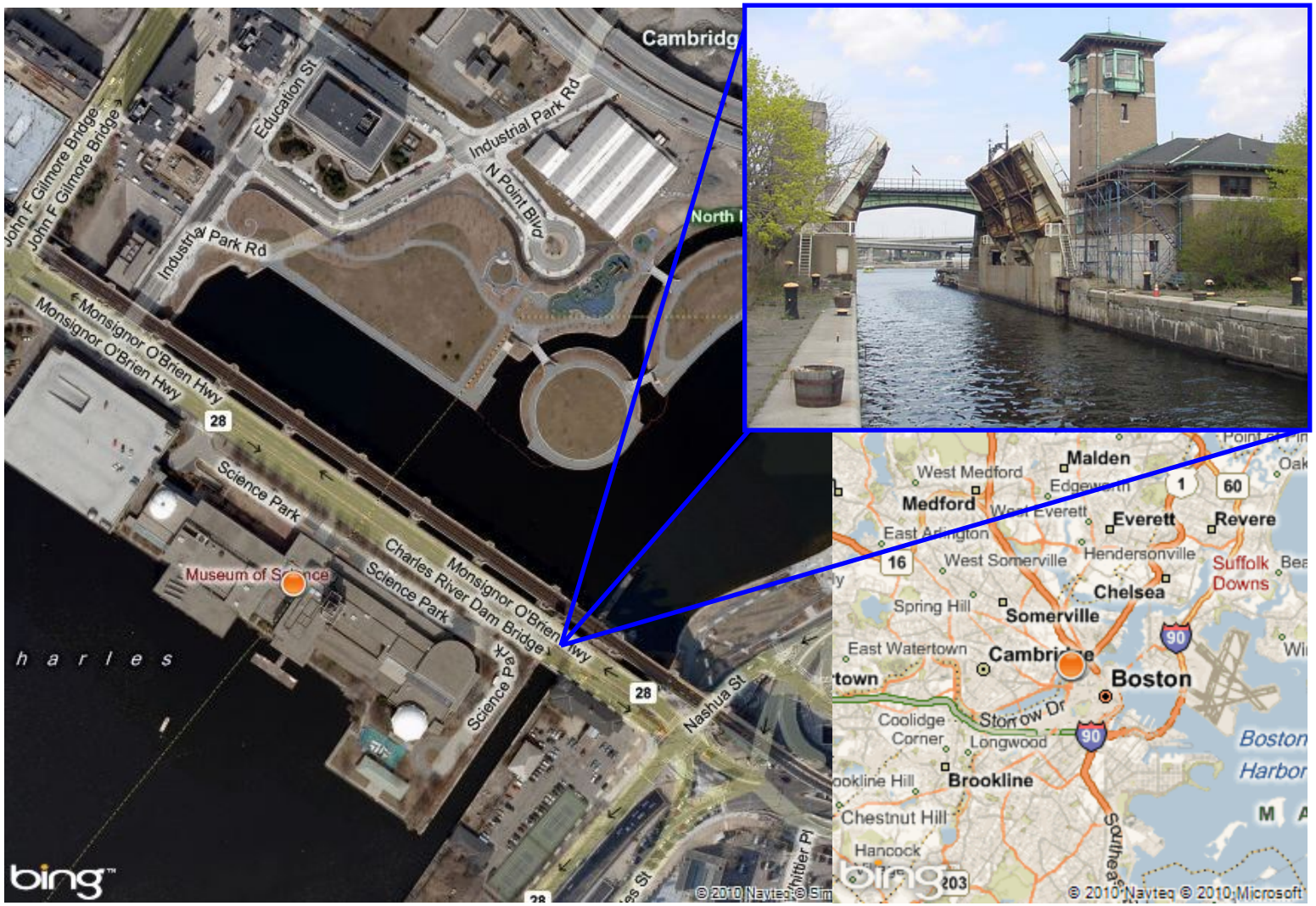
Craigie Dam and Drawbridge - Boston



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Craigie Dam and Drawbridge - Boston

Difficult approaches can be dangerous for sidewalk users

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Craigie Dam and Drawbridge - Boston

Design change to improve user safety

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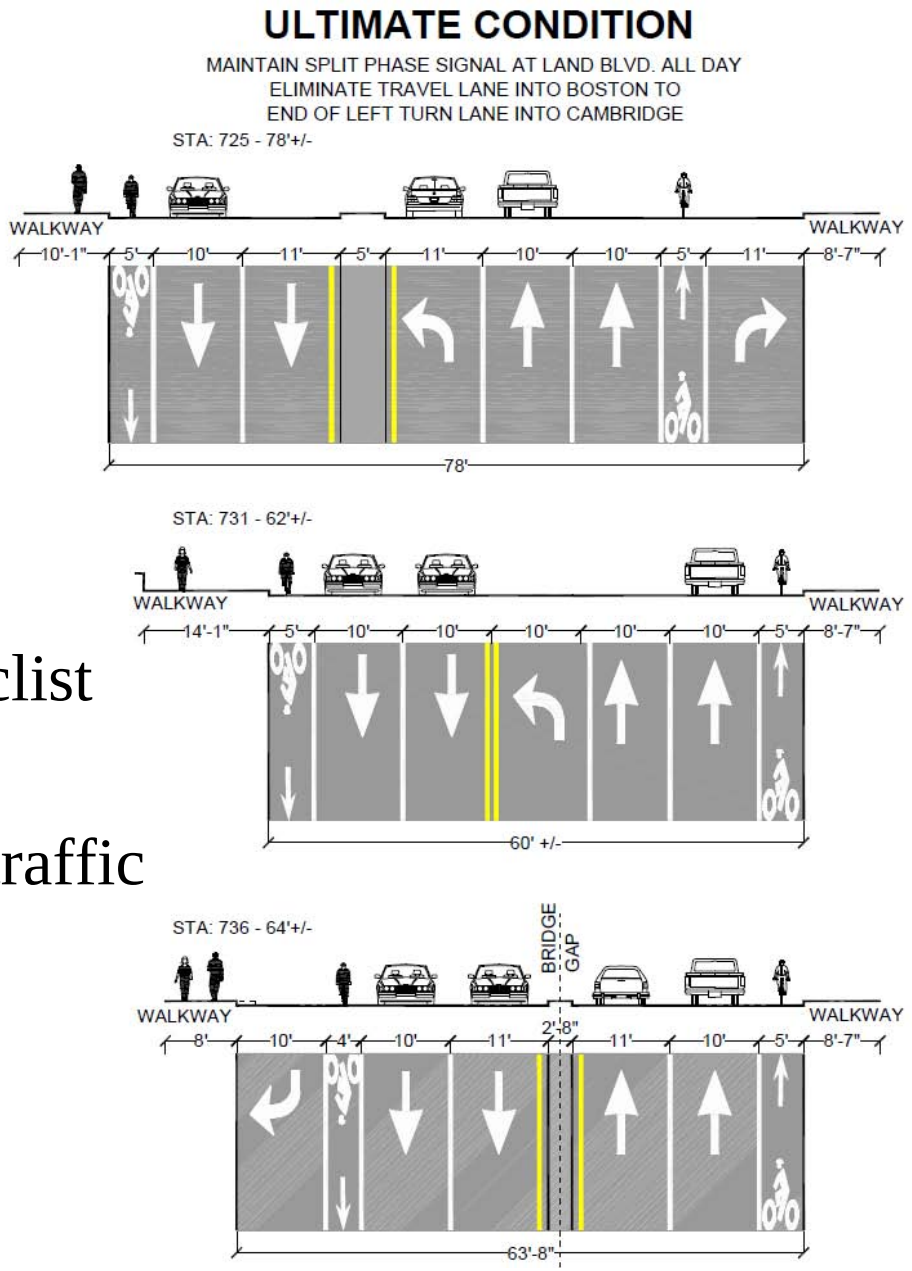
Craigie Example



- **Final Proposed Condition**
  - Bicycle lanes in both directions improving cyclist comfort on road
  - Reinstitutes island for traffic signal

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Current Measures - Halvorson Contract

Team including Halvorson Design, Alta Engineering, and HDR

- **Assesses bike, pedestrian, and accessibility throughout Charles River Basin**
- **Focus on connections at the bridge crossings within ABP**
- **Developed existing conditions report of entire basin area for future use by MassDOT and DCR and others for improving connectivity**
- **Will be developing connectivity study over this summer**
- **Makes recommendations on final design**

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Existing Conditions – Data Collection

- User Counts taken at key locations
- Review of historical data
- Provided preliminary recommendations

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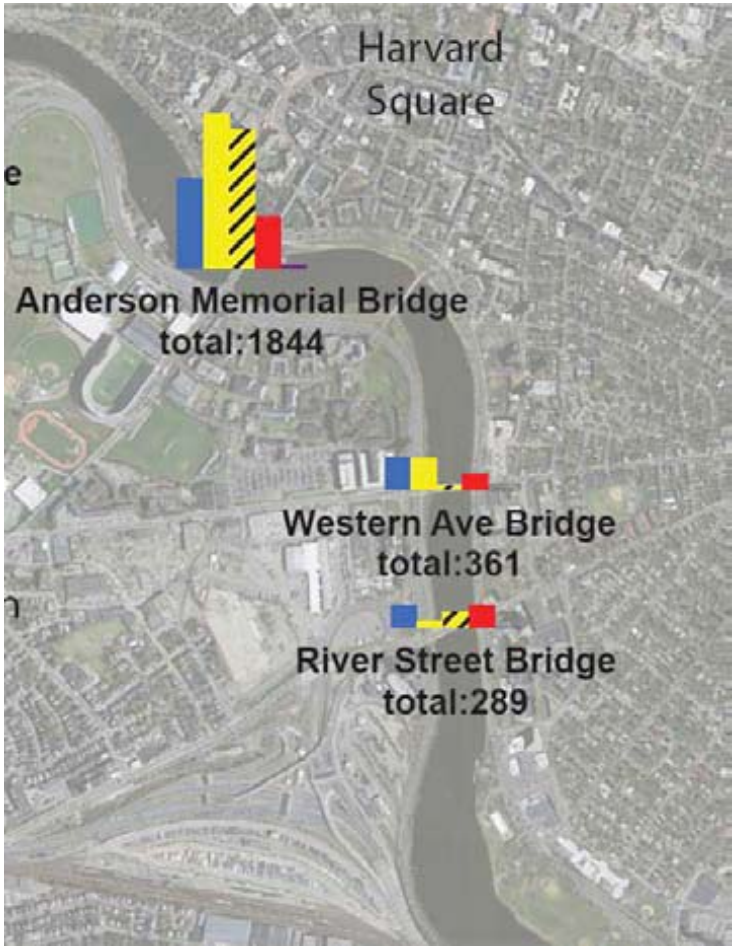
Existing Conditions - User Counts

- **User counts developed are used by project teams for evaluating options**



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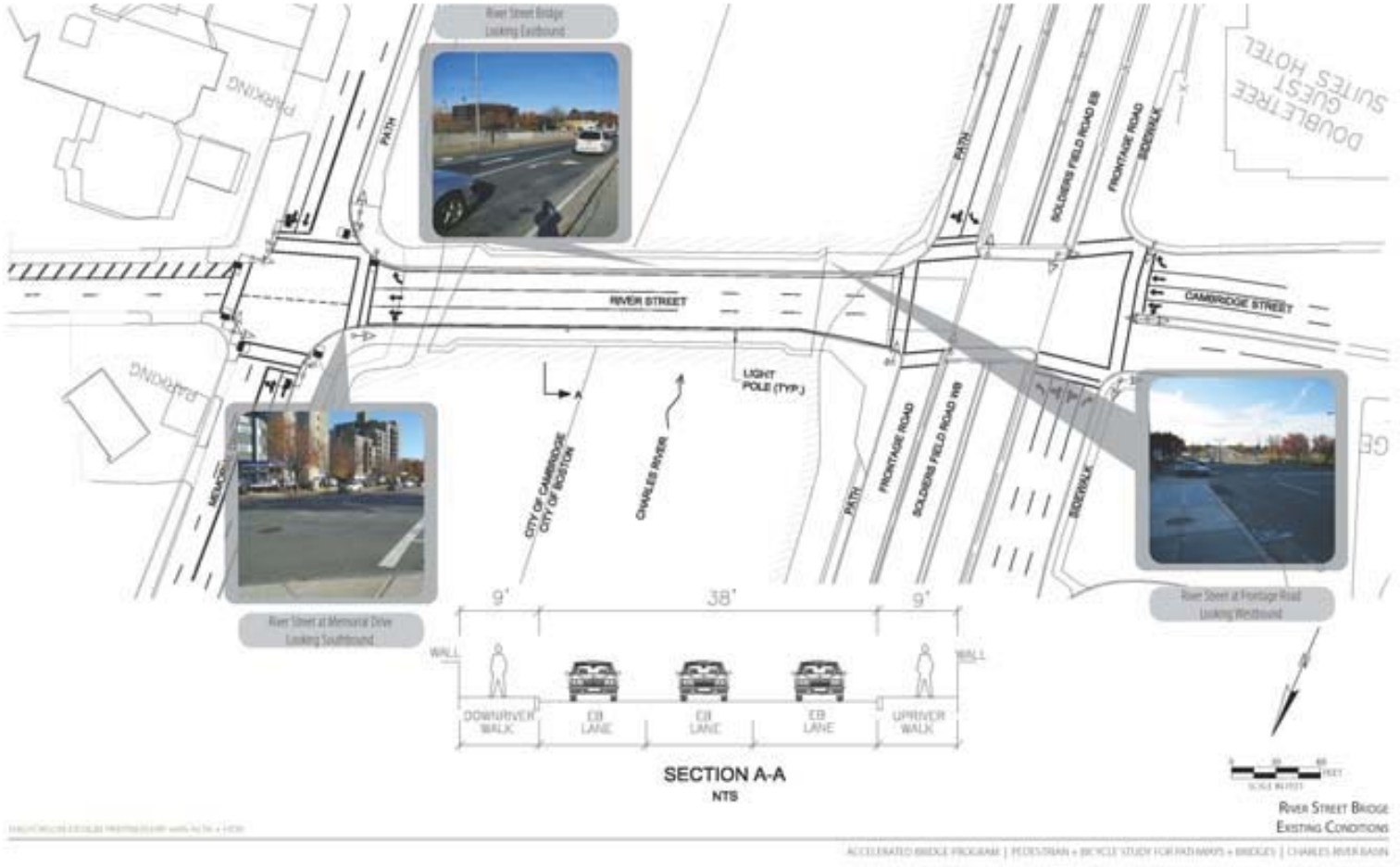
Existing Conditions – Project Specific



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Existing Conditions – Project Specific

- **ADA- Bike-Pedestrian preliminary Recommendations**
- **Provided to design consultant at ~25% design stage**

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Active Risk management and Sequencing – Traffic Component

Team including Geocomp, HDR, and VHB

- **Developed localized basin-wide traffic model**
  - Allows for better planning of detours
  - Incorporates considerations for all road users – not just motorists
- **Has connection to regional CTPS model**
  - Enables analysis of transit use and regional detours

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Public Outreach

- **MassDOT is committed to public outreach throughout the duration of design and construction.**

- **To submit concerns, request additional information or be added to the Charles River Basin project database please contact:**

  - Stephanie Boundy, Accelerated Bridge Program Public Outreach Coordinator
  - Telephone: (617)973-8049
  - Email: stephanie.boundy@state.ma.us

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For More Information

- www.mass.gov/acceleratedbridges

- **For news and updates check out our website www.mass.gov/massdot, blog at www.mass.gov/blog/transportation or follow us on twitter at www.twitter.com/massdot.**

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